G

YAMAHA

CDX-397MK2

COMPACT DISC PLAYER

LECTEUR COMPACT DISQUE

OWNER'S MANUAL
MODE D'EMPLOI
BEDIENUNGSANLEITUNG
BRUKSANVISNING
MANUALE DI ISTRUZIONI
MANUAL DE INSTRUCCIONES
GEBRUIKSAANWIJZING
ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ
使用说明书

CAUTION: READ THIS BEFORE OPERATING YOUR UNIT.

1 To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.

2 Install this sound system in a well ventilated, cool, dry, clean place with at least 10 cm on the top, 10 cm on the left and right, and 10 cm at the back of CDX-397MK2 — away from direct sunlight, heat sources, vibration, dust, moisture, and/or cold.

3 Locate this unit away from other electrical appliances, motors, or transformers to avoid humming sounds.

4 Do not expose this unit to sudden temperature changes from cold to hot, and do not locate this unit in an environment with high humidity (i.e. a room with a humidifier) to prevent condensation inside this unit, which may cause an electrical shock, fire, damage to this unit, and/or personal injury.

5 Avoid installing this unit where foreign object may fall onto this unit and/or this unit may be exposed to liquid dripping or splashing. On the top of this unit, do not place:

- Other components, as they may cause damage and/or discoloration on the surface of this unit.
- Burning objects (i.e. candles), as they may cause fire, damage to this unit, and/or personal injury.
- Containers with liquid in them, as they may fall and liquid may cause electrical shock to the user and/or damage to this unit.

6 Do not cover this unit with a newspaper, tablecloth, curtain, etc. in order not to obstruct heat radiation. If the temperature inside this unit rises, it may cause fire, damage to this unit, and/or personal injury.

7 Do not plug in this unit to a wall outlet until all connections are complete.

8 Do not operate this unit upside-down. It may overheat, possibly causing damage.

9 Do not use force on switches, knobs and/or cords.

10 When disconnecting the power cable from the wall outlet, grasp the plug; do not pull the cable.

11 Do not clean this unit with chemical solvents; this might damage the finish. Use a clean, dry cloth.

12 Only voltage specified on this unit must be used. Using this unit with a higher voltage than specified is dangerous and may cause fire, damage to this unit, and/or personal injury. Yamaha will not be held responsible for any damage resulting from use of this unit with a voltage other than specified.

13 Do not attempt to modify or fix this unit. Contact qualified Yamaha service personnel when any service is needed. The cabinet should never be opened for any reasons.

14 When not planning to use this unit for long periods of time (i.e. vacation), disconnect the AC power plug from the wall outlet.

15 Be sure to read the "TROUBLESHOOTING" section on common operating errors before concluding that this unit is faulty.

16 Before moving the unit, first remove the disc from the unit, press POWER to turn the unit off, and then disconnect the AC power plug from the wall outlet.

17 Condensation will form when the surrounding temperature changes suddenly. Disconnect the power cable from the outlet, then leave the unit alone.

18 When using the unit for a long time, the unit may become warm. Turn the power off, then leave the unit alone for cooling.

19 Install this unit near the wall outlet and where the AC power plug can be reached easily.

20 The batteries shall not be exposed to excessive heat such as sunshine, fire or like.

As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if you turn off this unit by POWER.

DANGER

When this unit is plugged to the wall outlet, do not place your eyes close to the opening of the disc tray and other openings to look into inside.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

For U.K. customers

If the socket outlets in the home are not suitable for the plug supplied with this appliance, it should be cut off and an appropriate 3 pin plug fitted. For details, refer to the instructions described below.

Note:

The plug severed from the mains lead must be destroyed, as a plug with bared flexible cord is hazardous if engaged in a live socket outlet.

SPECIAL INSTRUCTIONS FOR U.K. MODEL

IMPORTANT:

THE WIRES IN MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

Blue: NEUTRAL
Brown: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED. Making sure that neither core is connected to the earth terminal of the three pin plug.

English

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Thank you for selecting this Yamaha compact disc player.

FEATURES

- **CD-R, CD-RW Disc Playability**
  (For details, refer to page 22.)
- **CD-TEXT Data Display capability**
- **Program Play**
- **Random-Sequence Play**
- **Single Track/Entire Disc Repeat Play**
- **Automatic Spacing Function**
- **Track Programming Function Useful for Recording Tracks Fitted onto Any Length of Tape**
- **Automatic Peak Level Search Function**
- **CD Synchronized Recording**
- **Adjustable Display Brightness**
- **Remote Control Capability**
- **Optical Digital Output**
- **MP3, WMA Disc Playability**

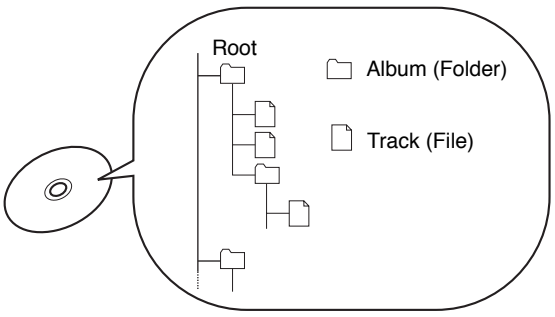
SUPPORTED DISC TYPES

You can enjoy music discs with this unit. Since some disc operations of this unit are limited to specific disc types, the supported disc types are indicated using the icons shown below. Each icon means that the operation is limited to the corresponding disc type. For information on supported disc standards and disc usage notes, refer to "NOTES ABOUT DISCS" (page 22). Operations with no icon indicated are available for all disc types.

Music CD	MP3, WMA
Audio CD	**MP3, WMA**

About MP3 and WMA discs

You can play back MP3 and WMA files recorded on a CD-R or CD-RW with similar uses as a music CD. This unit regards folders in the disc as albums, and files as tracks (as shown below).



What is MP3?

"MP3 (MPEG-1 Audio Layer-3)" is a standard technology and format for compressing an audio sequence into a small-sized file. However, the original level of sound quality is preserved during playback. Some MP3 discs have the ID3 tag information.

* ID3 tag means the metadata recorded on the MP3 disc such as the song title, artist name, etc.

Notes

- Depending on recording conditions such as recording software settings, this unit may not be able to play back the disc or play back files in the order they were recorded.
- This unit is compatible with a bit rate range of 32, 64, 96, 128, 160, 192, 256 or 320 kbps and variable bit encoded MP3 files.
- This unit is compatible with a sampling frequency of 44.1, or 48 kHz.
- The disc must be ISO9660 compatible.

What is WMA?

"WMA (Windows Media Audio)" is a Microsoft file format for encoding digital audio files similar to MP3 though can compress files at a higher rate than MP3.

Notes

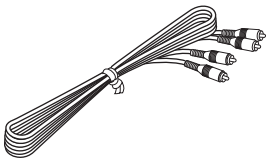
- This unit is compatible with a bit rate range of 192 kbps or less and variable bit encoded WMA files.
- This unit is compatible with a sampling frequency of 44.1 kHz.
- The disc must be ISO9660 compatible.
- Copyright-protected WMA files can not be played back with this unit.

UNPACKING

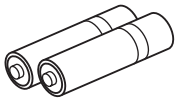
Carefully remove this unit and accessories from the box. You should find the unit itself and the following accessories.

Remote control

Audio pin cable



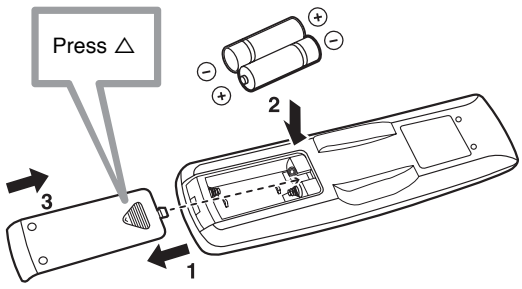
Batteries (AAA, R03, UM-4) x 2



NOTES ABOUT THE REMOTE CONTROL

Battery installation

1. Turn the remote control over and remove the battery compartment cover by sliding it in the direction of the arrow.
2. Insert the batteries (AAA, R03, UM-4) according to the polarity markings on the inside of the battery compartment.
3. Close the battery compartment cover.



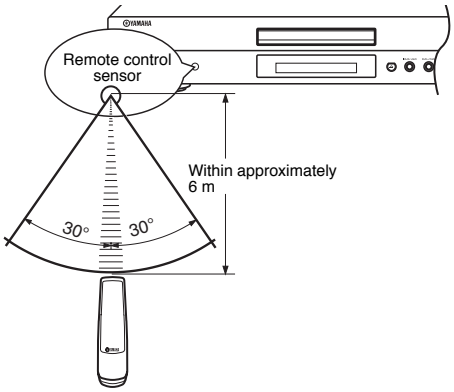
Battery replacement

If you notice that the remote control must be used closer to the main unit, the batteries are weak. Replace both batteries with new ones.

Notes

- Use only AAA, R03, UM-4 batteries for replacement.
- Be sure the polarities are correct. (See the illustration inside the battery compartment.)
- Remove the batteries if the remote control is not used for an extended period of time.
- If batteries leak, dispose of them immediately. Avoid touching the leaked material or letting it come in contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.

Remote control operation range

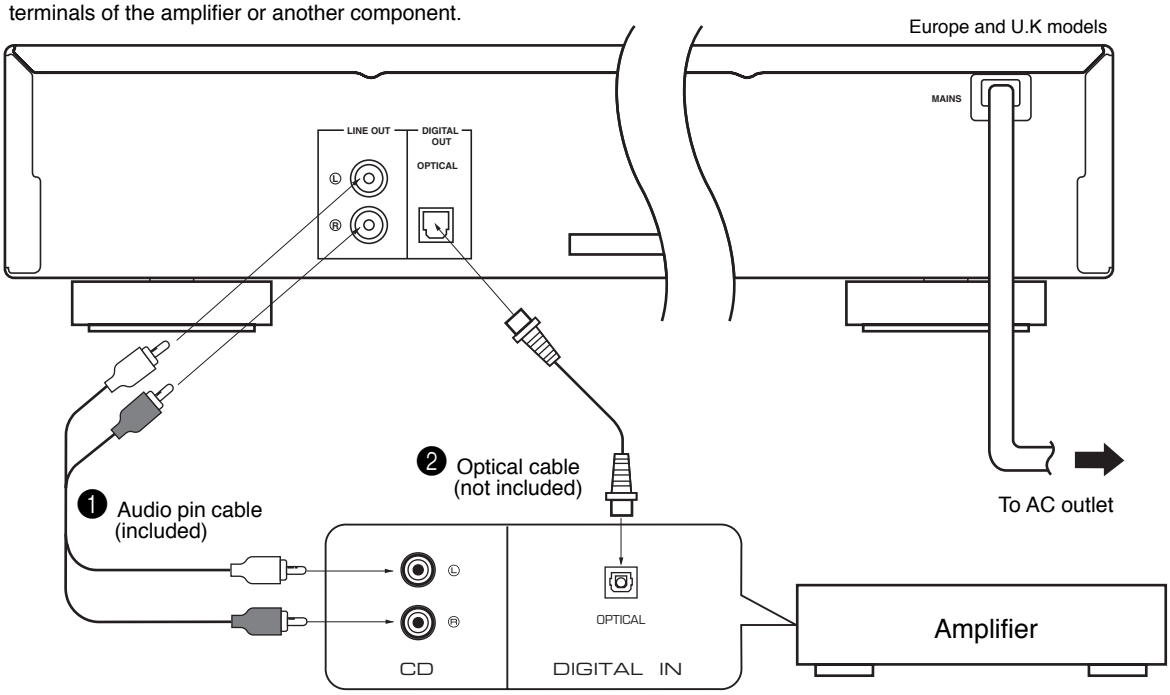


Notes

- There should be no large obstacles between the remote control and the main unit.
- If the remote control sensor is directly illuminated by strong lighting (especially an inverter type fluorescent lamp etc.), the remote control might not work properly. In this case, reposition the main unit to avoid direct lighting.

CONNECTIONS

- Before making any connection, switch OFF the power to the unit and the amplifier or other component.
- Connections should be made to the correct input terminals of the amplifier or another component.
- If the placement of this unit causes noise to another equipment, such as a tuner, separate them from each other.



■ To connect this unit to your amplifier, choose one of the ways listed below.

Caution Do not plug in this unit to a wall outlet until all connections are complete.

When the LINE OUT (analog) terminals of this unit are used (1)

Connect these terminals to the "CD" (or "AUX") terminals of the amplifier. For details concerning these connections, refer to the operation instructions of the amplifier being used.

* Be sure that the left ("L") and right ("R") of these terminals are connected to the corresponding (left and right) terminals of the amplifier or another component.

- The level of signals output from any of these terminals into an amplifier can be adjusted by the **OUTPUT LEVEL +/–** buttons.
- When using the DIGITAL OUT (OPTICAL) terminal, set the level of signals output into an amplifier to max. by using the **OUTPUT LEVEL +/–** buttons.

When the DIGITAL OUT (OPTICAL) terminal of this unit is used (2)

- Make the connection from this terminal to the optical input terminal of an amplifier by using a commercially available optical cable.
  * Use a reliable optical cable.
- This terminal can also be connected to the optical input terminal of an MD recorder etc. to record CD onto MD directly.

■ To connect this unit to the AC outlet

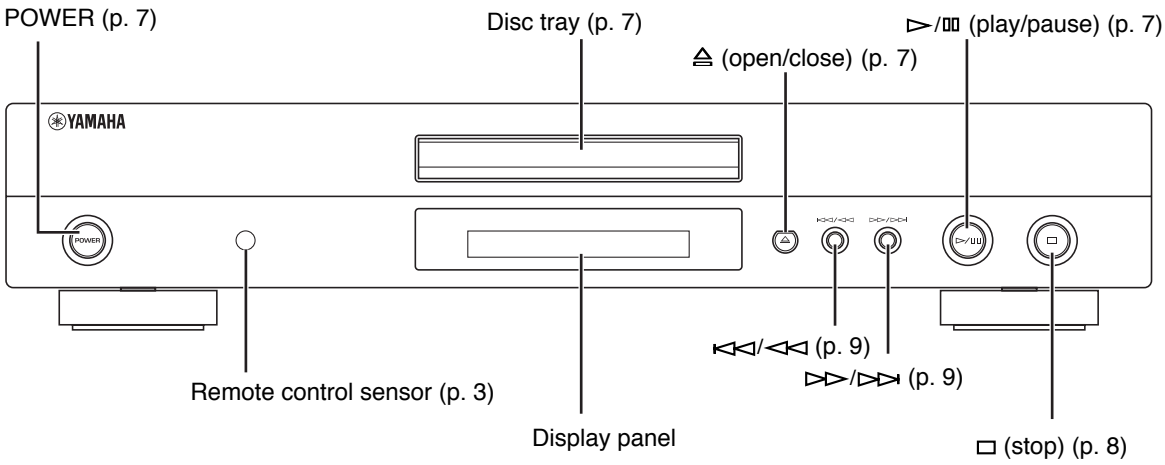
After you made all connections, connect the power cable of this unit to the AC outlet.

IDENTIFICATION OF COMPONENTS

( ) indicates the page number on which the controls are best described.

Front panel

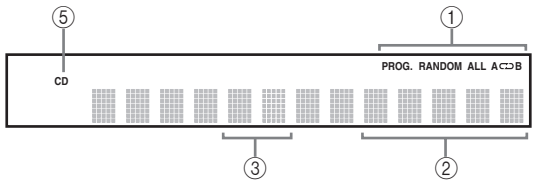
The control functions on the main unit and on the remote control are virtually identical, with the exceptions below.



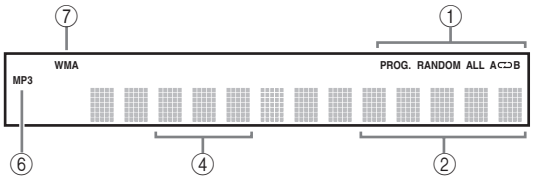
- ▷/▯▯ on the main unit has both the functions of ▷ (play) and ▯▯ (pause) on the remote control.
- ⏮/⏪ and ⏩/⏭ on the main unit has both the functions of ⏮/⏭ (skip) and ⏪/⏩ (search) on the remote control.

Display

Audio CD

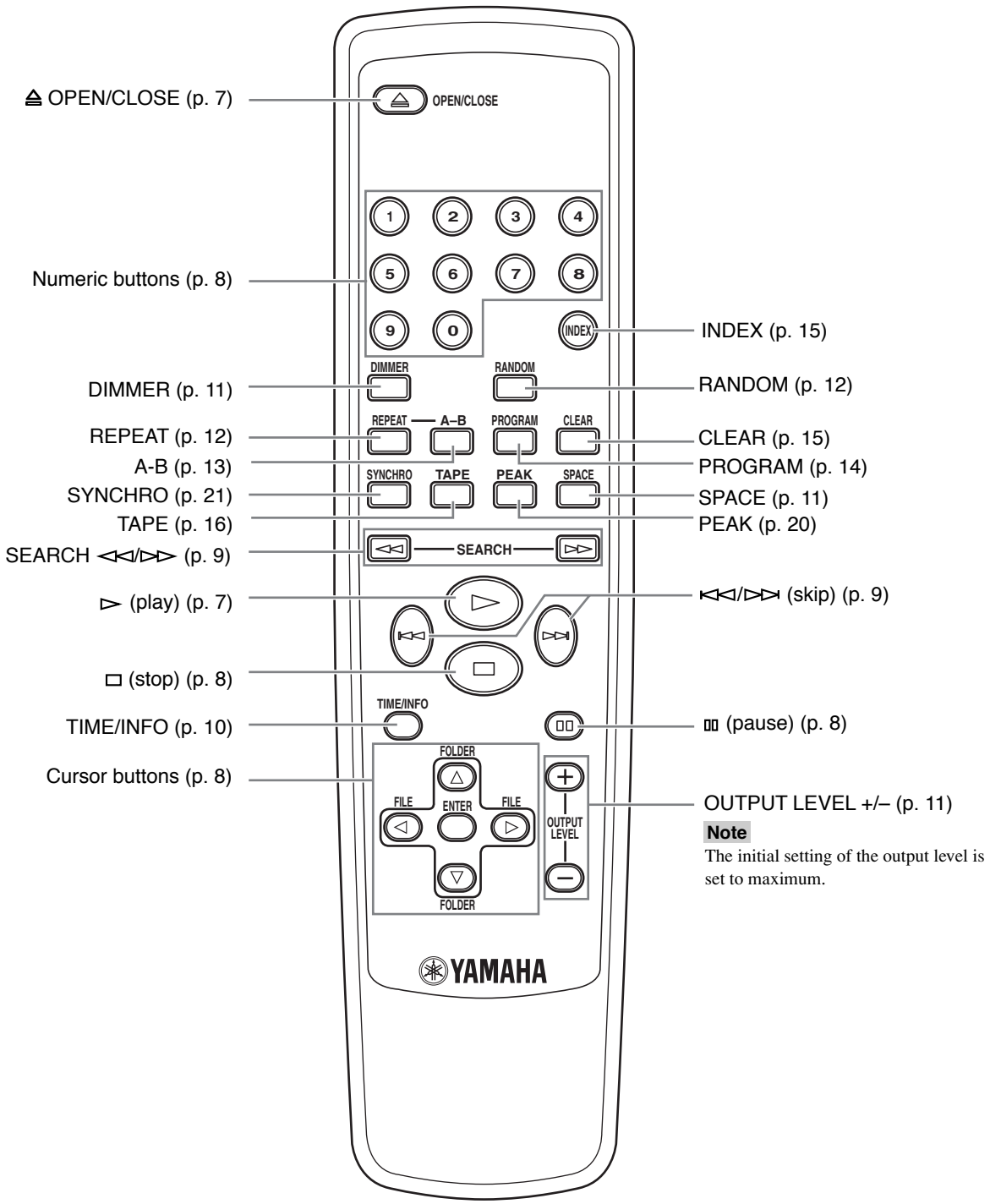


MP3, WMA



① Lights up the icon for the selected playback mode.
② Shows the time displays. (For details, refer to on page 10.)
③ Shows the track number selected or being played back.
④ Shows the file number.
⑤ Lights up when a music disc is in the disc tray.
⑥ Lights up when the MP3 disc is played back.
⑦ Lights up when the WMA disc is played back.

Remote control

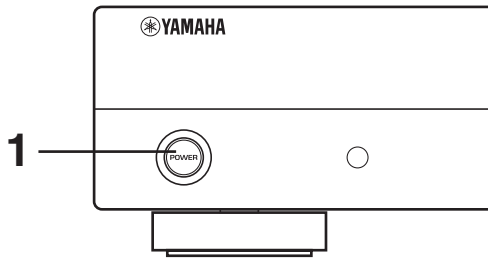


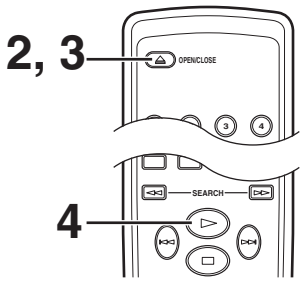
Note

The initial setting of the output level is set to maximum.

This manual describes how to operate this unit by using the remote control.
To operate this unit from the front panel, use the corresponding buttons on the front panel.

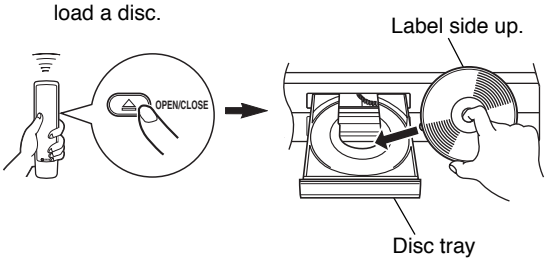
BASIC OPERATION



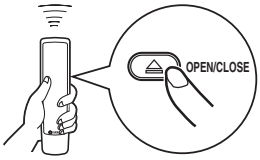


1 Press **POWER** to turn on the power.

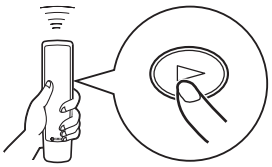
2 Press ⏏ **OPEN/CLOSE** to open the disc tray, and load a disc.



3 Press ⏏ **OPEN/CLOSE** to close the disc tray.



4 Press ▻ to start playback.

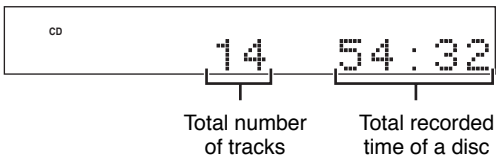


Playback starts from the first track of the disc.

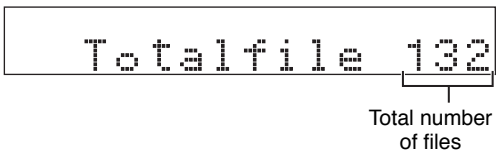
Notes

- After closing the disc tray by pressing ⏏ **OPEN/CLOSE**, the display shows the following information.

Audio CD



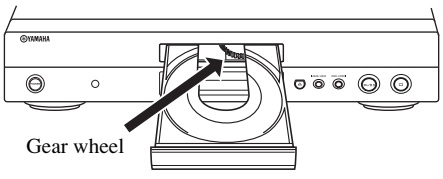
MP3, WMA



- Additionally, you can close the disc tray by pressing ▻, a numeric button or **RANDOM**, or by pressing the front edge of the disc tray gently. If the tray is closed in one of these ways, playback starts automatically; however, the display will not show the total number of tracks nor the total recorded time of the disc.

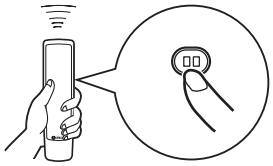
Caution

When the disc tray is open, **do not touch the inside gear wheel**. If you touch the gear wheel, your finger may be caught in the closing tray and injured.



To pause playback

Press ⏸.

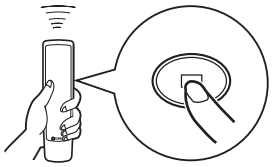


To resume the playback, press ⏸ again (or press ▷).

* ▷/⏸ on the front panel can also be used to stop the playback temporarily or to resume the playback.

To stop playback

Press ■.



* If you press ▷ again, the playback starts from the first track.

To turn off the power

Press **POWER** again.

* If you turn on the power again with a disc still on the tray, the playback starts automatically from the first track.

To play back the desired track

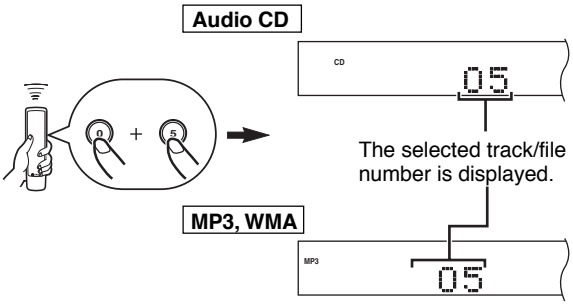
Select a desired track by using the numeric buttons.

Example: To select a track number 5

Press “0” and then, press “5”.

* In case of an MP3 or WMA file which has 100 files or more, press “0” twice and then, press “5”.

* Pressing a desired track and waiting for a few second can also start playback.



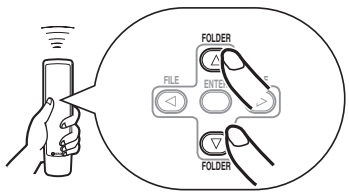
* This display is an example of an MP3 disc.

* The file number is recognized per disc, not per folder. That is, the number assigned to each file corresponds sequence of a disc.

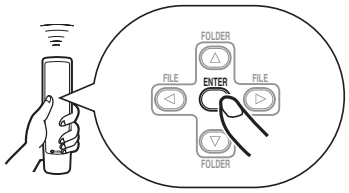
To search an folder/file on an MP3 or WMA disc

You can play back the desired folder or file by using cursor buttons.

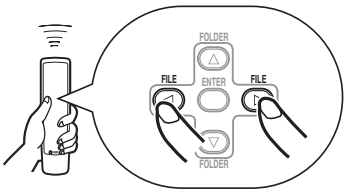
1 Press **FOLDER** ▽/△ to select the desired folder.



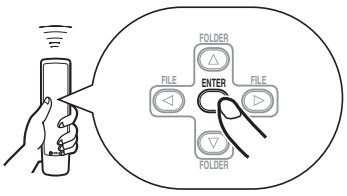
2 Press **ENTER**.



3 Press **FILE** ◁ / ▷ to select the desired file.



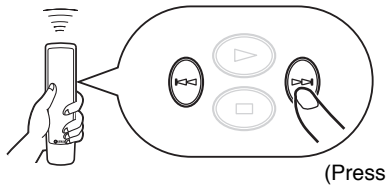
4 Press **ENTER**.



The playback starts from the selected file.

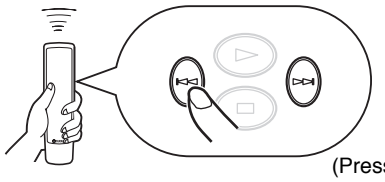
To skip to the beginning of the desired track (Skip search)

To play back from the beginning of the next track



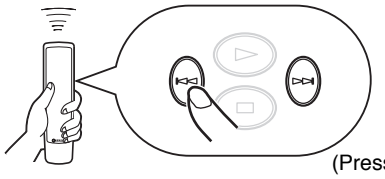
(Press once.)

To play back from the beginning of the current track



(Press once.)

To play back from the beginning of the preceding track

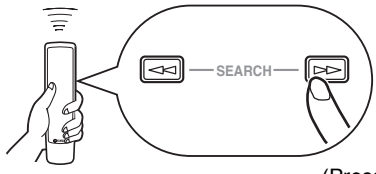


(Press twice.)

- These operations can also be performed when the unit is paused or stopped.
- Pressing and holding ⏮ (or ⏭) on the remote control skips tracks continuously toward lower (or higher) numbers.
- These operations can also be performed using ⏮/◀◀ and ▶▶/⏭ on the front panel.

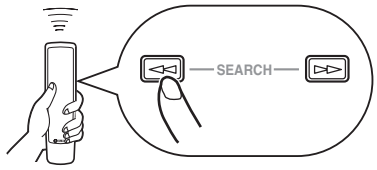
To advance or reverse playback rapidly (Manual search)

To advance rapidly



(Press and hold.)

To reverse rapidly



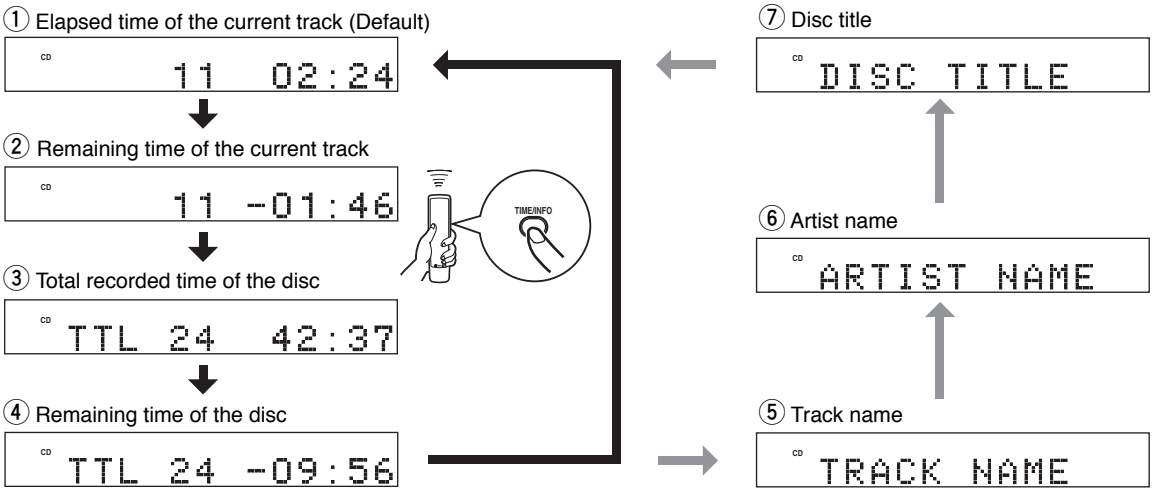
(Press and hold.)

- The sound can be heard (although slightly garbled) during manual search in either direction. This is convenient for locating a precise position within a track, or for reviewing the contents quickly.
- In case Manual search is performed, pause will be canceled.
- These operations can also be performed using ⏮/◀◀ and ▶▶/⏭ on the front panel.

Changing display

■ When playing back an Audio CD

You can select the following displays (① – ④) by pressing **TIME/INFO**. When you play back a CD-TEXT disc, the disc title, artist name, and track name (⑤ – ⑦) are also displayed.

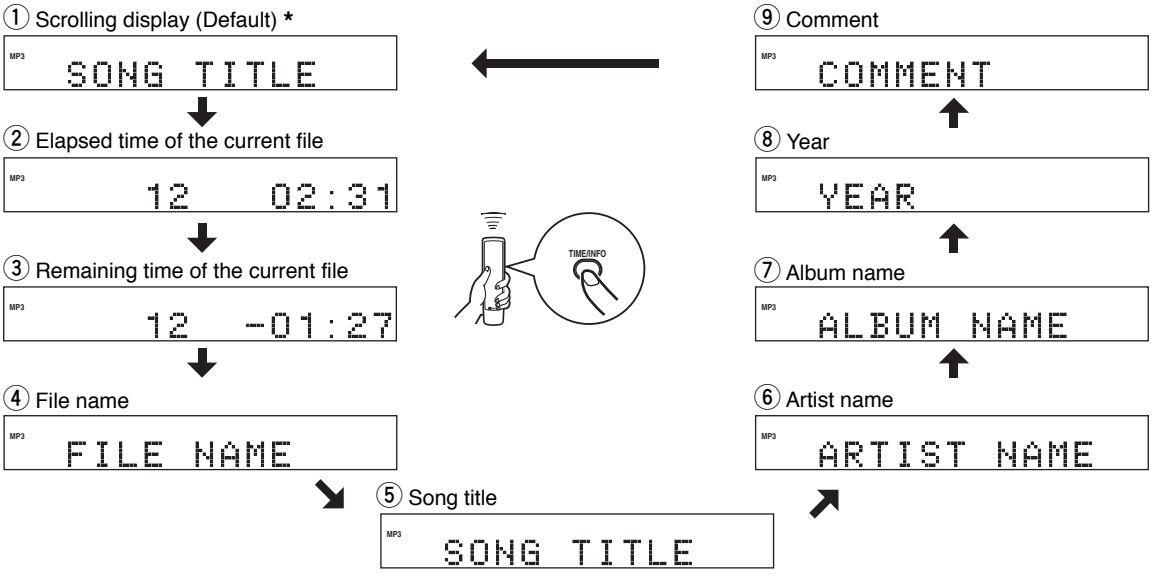

① Elapsed time of the current track (Default)
CD 11 02:24
② Remaining time of the current track
CD 11 -01:46
③ Total recorded time of the disc
CD TTL 24 42:37
④ Remaining time of the disc
CD TTL 24 -09:56
TIME/INFO
⑤ Track name
CD TRACK NAME
⑥ Artist name
CD ARTIST NAME
⑦ Disc title
CD DISC TITLE

Notes

- The text information may not be displayed with some CD-TEXT discs.
- This unit can only shows alphanumeric characters.

■ When playing back an MP3 or WMA

You can select the following displays (① – ⑨) by pressing **TIME/INFO**.



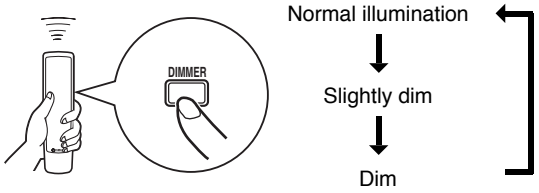
* Scrolling display shows the song title, artist name and album name of the selected item.

Notes

- Some information of ID3 tags may not be displayed with some discs.
- This unit can only shows alphanumeric characters.

Changing brightness of the display

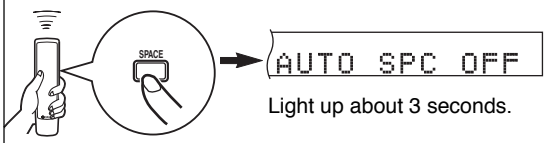
You can change brightness of the display in three degrees by pressing **DIMMER**.



Automatic spacing

If you record a disc onto tape with an insufficient time space between tracks, the tape deck will not be able to perform blank search operations on the tape correctly. To enable a track search operation, use this function to add an interval of about 4 seconds between tracks.

Press **SPACE** to light up the current setting.



Light up about 3 seconds.

While the current setting is lit up, press **SPACE** to change the setting between “AUTO SPACE ON” and “AUTO SPACE OFF”.

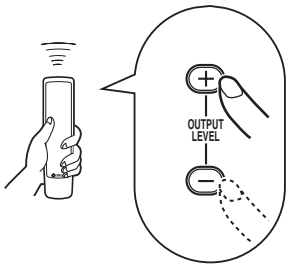
AUTO SPC ON

Notes

- When the automatic spacing function is in effect, the display of the total time and of the total remaining time includes each interval of the 4 seconds between tracks.
- When the automatic spacing function is in effect during the playback, “AUTO SPC 4” (the remaining seconds of the interval) appears and is counted down each time blinking at the interval between the tracks.

Adjusting the output level

You can adjust the level of signals output to the amplifier by pressing **OUTPUT LEVEL +/–**.



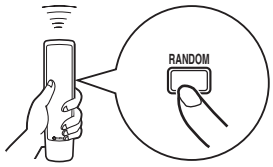
Note

While playing back an MP3/WMA disc, the level of the audio signal sent to the DIGITAL OUT (OPTICAL) terminal is fixed at maximum regardless of the displayed volume level.

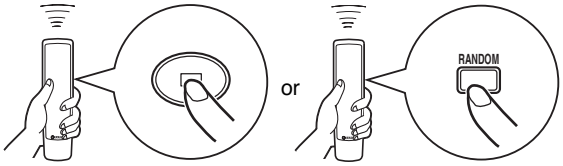
RANDOM-SEQUENCE PLAY

You can play back the tracks on a disc in a random sequence.

To perform random-sequence play
Press **RANDOM.**



To cancel random-sequence play
Press □ or **RANDOM.**

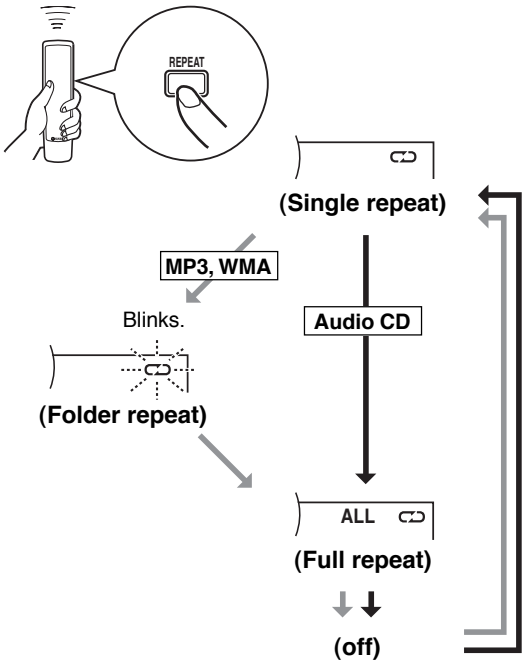


Note
If the power is switched off during random-sequence play, pressing **POWER** again to turn on the unit automatically restores random-sequence play.

REPEAT PLAY

Repeat a selected item

You can play back any desired track, album or the entire disc repeatedly by pressing **REPEAT**. The repeat playback mode changes whenever you press **REPEAT**.



(Single repeat)
A single track is played back repeatedly.
* This also works for program play and random-sequence play. (If repeat play is switched off, program play or random-sequence play is resumed.)

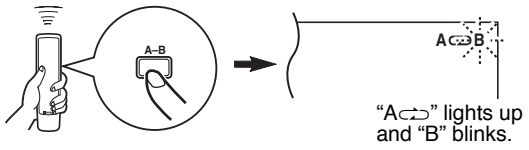
(Folder repeat)
MP3,WMA
* The all files in the selected folder are played back repeatedly.

ALL (Full repeat)
All tracks (the entire disc) are played back repeatedly.
* During program play, all programmed tracks are played back repeatedly.
* If the power is switched off during full repeat play, pressing **POWER** again to turn on the unit automatically restores full repeat.

Repeat A-B

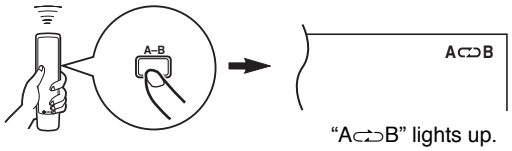
You can repeat the specified section of the disc by setting two points (start and end point).

1 Press **A-B** to select the start point of repeat play.



"A⊂⊃" lights up and "B" blinks.

2 Press **A-B** to select the end point of repeat play.



"A⊂⊃B" lights up.

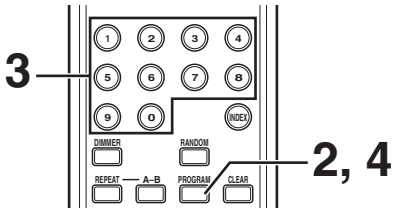
The selected section is played back repeatedly.

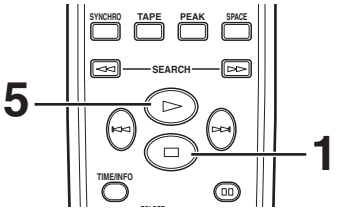
To cancel the repeat A-B

Press **A-B** repeatedly until "A⊂⊃B" disappears from the display.

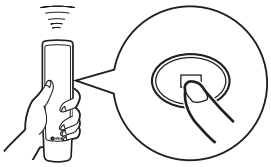
PROGRAM PLAY

You can enjoy listening to your favorite tracks in any desired order by programming tracks. 40 tracks can be programmed in sequence.

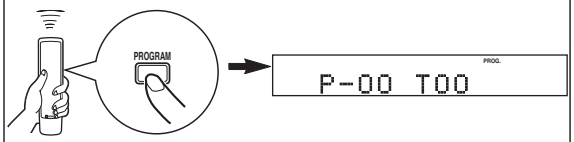




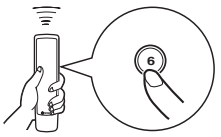
1 Press □ to stop the playback.



2 Press **PROGRAM**.



3 Program a desired track by pressing the corresponding numeric button.

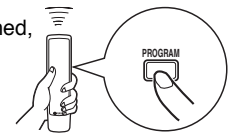


Repeat this operation to program more tracks. You can select the same track again.

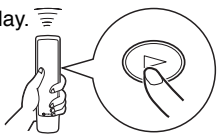
MP3, WMA

The file number is recognized per disc, not per folder. That is, the number assigned to each file corresponds sequence of a disc.

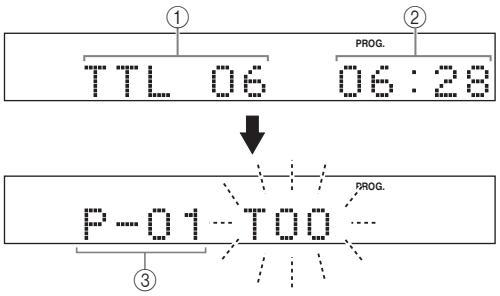
4 When programming is finished, press **PROGRAM**.



5 Press ▷ to start program play.



Display information in step 3



① Shows the total number of the tracks currently programmed.
② Shows the total time of the tracks currently programmed.
③ Shows the program number for the track to be programmed next.

To stop program playback

Press □. The first programmed track number is displayed. To resume program play, press ▷. The playback starts from the first programmed track number.

To clear program data

There are several methods, as described below.

- Press □ or **CLEAR** while the unit is stopped.
- Open the disc tray.
- Switch off the power.

To check program data

1. If during program play, press □.
2. Press **PROGRAM**.
3. Each time ▷▷| is pressed, the track numbers and sequential order of the programmed tracks can be checked one after another. The display of the track number can be returned (sequentially in reverse order) by pressing |◁◁.

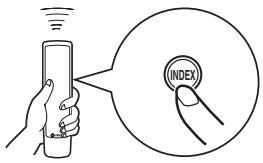
To correct program data

1. Follow the procedure described in "To check program data".
2. Display the track number to be corrected by pressing |◁◁/▷▷|.
3. Press a numeric button to select a desired track to replace the one displayed. The previously programmed track is cleared from the memory, and the new one is programmed.
4. Press **PROGRAM** to complete the correction. To start program play immediately after making the correction, press ▷ instead of pressing **PROGRAM**.

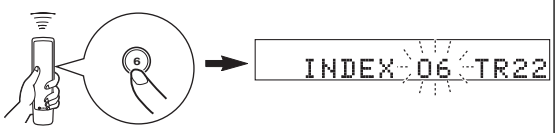
INDEX SEARCH

If the disc includes index numbers, playback can be started from any desired index number.

1 Press **INDEX.**



2 Press a numeric button to select the desired index number.



To cancel the index search function

Press **INDEX**.

Notes

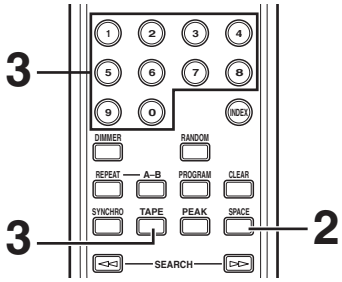
- Not all discs have index numbers. In addition, among those discs which have index numbers, not all discs necessarily have more than one index number.
- The index system is a method for sub-dividing tracks into smaller divisions for easier location of those parts. The liner notes contained in the disc case usually tell that such index numbers are included with the IN•DEX mark.
- For some discs, playback may starts slightly prior to the actual designated index point.
- If the disc has no encoded index points, playback starts from the beginning of the selected track.
- The index number can be designated only while "INDEX" is illuminated.

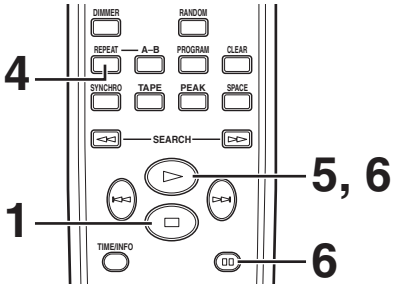
TRACK PROGRAMMING FOR RECORDING TO TAPE

The unit can program tracks on a disc for recording onto tape. By considering the total possible recording time of the tape, the unit automatically programs tracks or help you program tracks so they fits onto the tape with the least amount of unrecorded space at each end of the tape.

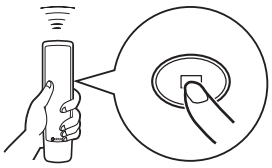
Automatic tape-programming (for Audio CD)

The unit automatically programs tracks on a disc with their original order.



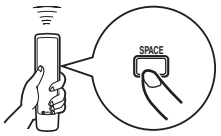


1 Press ☐ to stop the playback.



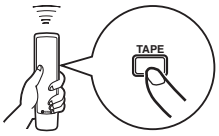
* The peak level search function of this unit is useful for adjusting recording level on the tape deck. (For details, refer to page 20.)

2 If desired, you can automatically insert additional time space between tracks. (For details, refer to page 11.)



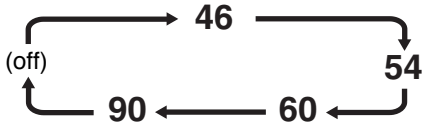
→ AUTO SPC ON

3 Press **TAPE** to show the total possible recording time of the tape on the display.

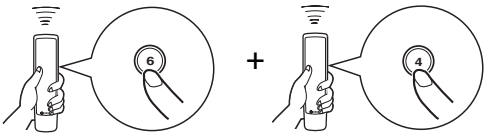


→ "TAPE 46" appears.

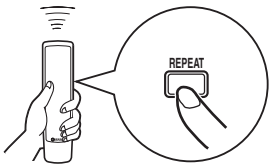
You can select any of the four tape lengths by pressing **TAPE**.



If desired, you can also enter the total possible recording time of the tape manually.
Example: For a C-64 tape (32 minutes on each side), press "6" and "4".



4 Press **REPEAT**.



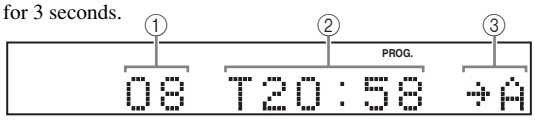
The unit automatically programs tracks for both side A and side B considering the total time of the tape.

5 Start recording on the tape deck, and then press ▻ on the remote control of this unit.

6 This unit automatically pauses at the end of the side A. Turn the tape over to the side B, resume recording on the tape deck, and then press ▻ or ▯▯ on the remote control of this unit to start playback.

Notes

- In step 4, you can check the program data for side A and side B after pressing **REPEAT**. Information for each side is displayed for 3 seconds.

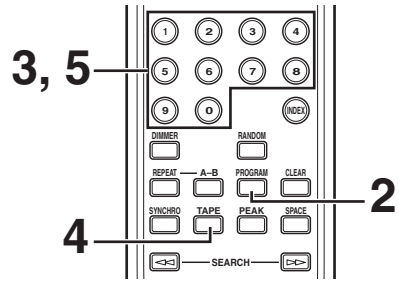


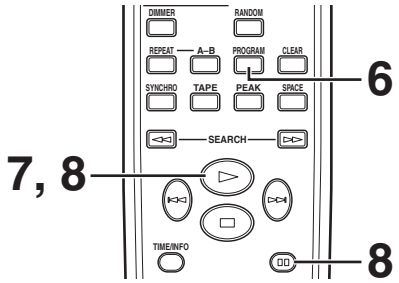
① Shows the number of programmed tracks.
② Shows the total time of programmed tracks.
③ Shows the side of the tape.

- All tracks may not be programmed if the tape length is not enough. To program all tracks, use a tape that is longer than the actual playing time.
- You can check, cancel or correct program data. (For details, refer to page 15.)
  * When checking program data, note that “Pu” appears between track numbers for side A and side B.
- Up to 40 tracks can be programmed. A pause inserted between side A and B is counted as one track.
- CD synchronized recording function can be used if your tape deck is compatible with this unit. If so, in step 5 and 6, press **SYNCHRO** and then press ⊳ on the remote control of this unit. Recording automatically starts. (For details, refer to page 21.)

Manual tape-programming (for Audio CD)

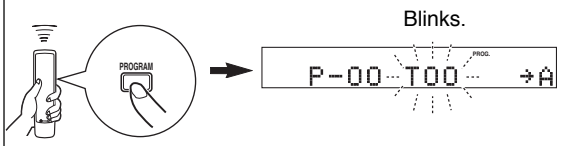
This is for recording desired tracks in any order onto a tape.



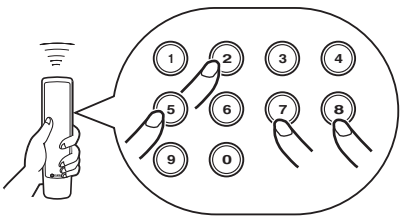


1 Follow steps 1 – 3 on page 16.

2 Press **PROGRAM**.



3 Use numeric buttons to select desired tracks (to be recorded on the side A) in any order.

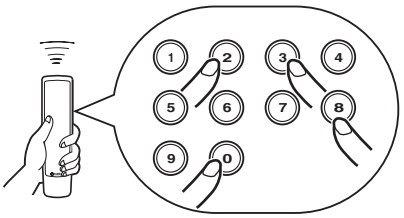


* Programmed track numbers light up on the display.

4 When track selection for side A is finished, press **TAPE**.

A pause is inserted.

5 Use numeric buttons to select the track numbers (to be recorded on the side B) in any order.



6 Press **PROGRAM**.

7 Start recording on the tape deck, and then press ▻ on the remote control of this unit.

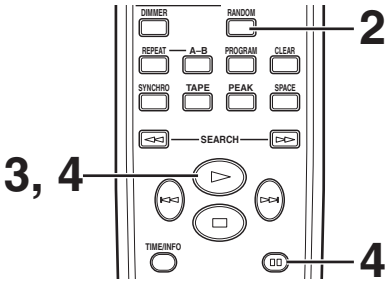
8 This unit automatically pauses at the end of the side A. Turn the tape over to the side B, resume recording on the tape deck, and then press ▻ or ▯▯ on the remote control of this unit to start playback.

Notes

- If, in step 3 or 5, "Err" appears on the display, the track number just selected cannot be programmed because there is not enough time remaining on the tape.
- In step 3 or 5, each time a selection is made, the track number and the remaining time of the tape is displayed, and then the display changes to indicate the next program number.
- You can check, cancel or correct program data. (For details, refer to page 15.)
  * When checking program data, note that "Pu" appears between track numbers for side A and side B.
- Up to 40 tracks can be programmed. If, however, a pause is inserted, it is counted as one track.
- CD synchronized recording function can be used if your tape deck is compatible with it. If so, in step 7 and 8, press **SYNCHRO** and then press ▻ on the remote control of this unit. Recording automatically starts. (For details, refer to page 21.)

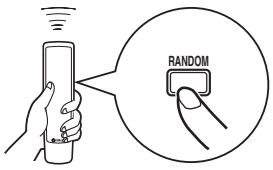
Random sequential tape-programming (for Audio CD)

The unit automatically programs tracks in random sequential order for recording to tape.



1 Follow steps 1 – 3 on page 16.

2 Press **RANDOM**.



* The unit automatically programs tracks at random for both side A and side B considering the total time of the tape.

3 Start recording on the tape deck, and then press ▻ on the remote control of this unit.

4 This unit automatically pauses at the end of the side A. Turn the tape over to the side B, resume recording on the tape deck, and then press ▻ or ▯▯ on the remote control of this unit to start playback.

Notes

- Because programmed data changes every time **RANDOM** is pressed, the unrecorded space at the end of each side of the tape also varies accordingly.
- All tracks may not be programmed if the tape length is not enough. To program all tracks, use a tape that is longer than the actual playing time.
- In step 2, you can check the program data for side A and side B. Information for each side is displayed for 3 seconds.

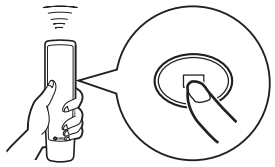
① Shows the number of programmed tracks.
② Shows the total time of programmed tracks.
③ Shows the side of the tape.

- Up to 40 tracks can be programmed. A pause inserted between side A and B is counted as one track.
- CD synchronized recording function can be used if your tape deck is compatible with it. If so, in step 3 and 4, press **SYNCHRO** and then press ▻ on the remote control of this unit. Recording automatically starts. (For details, refer to page 21.)

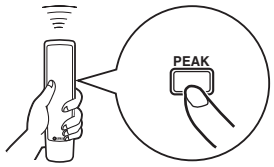
Automatic searching for the peak level on a disc (for Audio CD)

This unit automatically searches for the peak level of the disc, and play back the part repeatedly. When recording to tape, this feature is very helpful for adjusting the recording level on the tape deck.

1 Press □ to stop the playback.

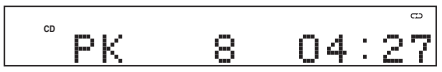


2 Press **PEAK**.



"PK" lights up on the display, and the peak level search is performed on the disc.
It takes a few minutes to search for the peak level.

After searching, this unit plays back the part around the peak level for about 4 seconds repeatedly. According to the peak level, adjust the recording level on your tape deck. (For details, refer to the owner's manual of the tape deck.)



To cancel the peak level search function

Press □.

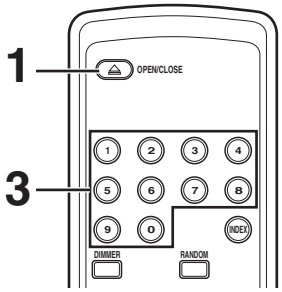
Note

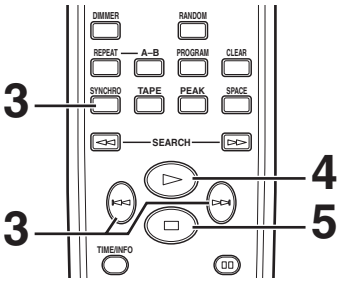
Even if the peak level search is performed several times on the same disc, the same part may not be always selected. That is because the unit searches for the peak level among parts of the disc that are randomly selected by the internal microcomputer.

CD SYNCHRONIZED RECORDING

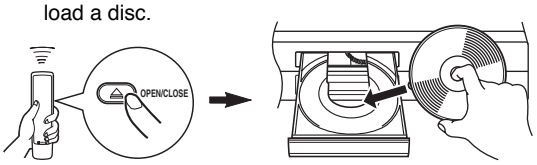
This unit can automatically synchronize a tape deck recording with CD play. With this function, you can record a CD on tape easily and precisely.
This recording method requires a Yamaha tape deck compatible with this function. (Refer to the tape deck operation manual to find out whether it is compatible or not.)

* This unit and the tape deck must be placed close to each other so that both of them can simultaneously receive the signals from the remote control of this unit.





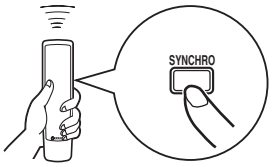
1 Press ≙ **OPEN/CLOSE** to open the disc tray, and load a disc.



2 Load a tape on the tape deck.

* The peak level search function of this unit is useful for adjusting recording level on the tape deck. (For details, refer to page 20.)

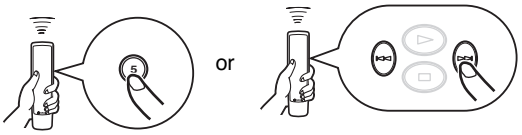
3 Press **SYNCHRO**.



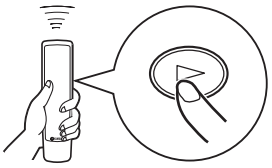
This unit enters into the pause mode, and the tape deck enters into the REC/PAUSE mode.

* In this state, the time display on this unit blinks on and off.

If necessary, select a desired track by pressing a numeric button or ⏮/⏭.



4 Press ▷.



Both CD playback and tape deck recording start.

* CD playback starts shortly after starting the recording.

5 If you want to stop recording temporarily and restart recording from a desired track, stop this unit by pressing □, and the tape deck as well, then follow steps 3 – 4 again.

To cancel synchronized CD-tape recording function

Press □.

Notes

- To finish or stop the recording, make proper operations on the tape deck. (For details, refer to the owner's manual of the tape deck.)
- Programmed sequence of tracks can also be recorded with this function instead of recording an entire disc. (For details, refer to pages 14 – 15.)
- This function can also be used together with the automatic tape-programming function. (For details, refer to pages 16 – 17.)

NOTES ABOUT DISCS

Discs playable with this unit

This compact disc player is designed only for playing back compact discs bearing the marks shown below. Never attempt to load any other type of disc into the unit. The unit can also play back 8-cm (3-inch) compact discs.

.... **Compact discs (digital audio)**
The most popular discs for commercially available audio CDs.

.... **CD-R,CD-RW digital audio discs**
Music CDs made by copying onto a CD-R or CD-RW (including MP3 or WMA format files).

Notes

- Be sure to use a CD-R or CD-RW disc made by a reliable manufacture.
- Be sure to use a CD-R or CD-RW disc which has at least one of the following phrases on the disc or disc case.
  FOR CONSUMER
  FOR CONSUMER USE
  FOR MUSIC USE ONLY
- Be sure to use a finalized CD-R or CD-RW disc.

.... **CD-TEXT discs**
The discs recorded with text data such as album titles, track titles and artist names. These discs can be played back with ordinary CD players, however, the text data can be displayed only with CD players which have the ability to display such data.

Note
This compact disc player may not be able to play back some CD-RW discs or discs on which recording was not made correctly.

To prevent a malfunction of this unit:

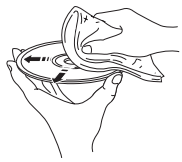
- Do not use any nonstandard shaped disc (heart etc.) available on the market because it might damage the unit.

- Do not use a disc with tape, seals, or paste on it. If you use such a disc, a disc may get stuck in the unit, or damage to the unit may result.

Notes about handling compact discs

- Always handle the disc with care so that its surface is not scratched.

- Compact discs are not subjected to wear during playback, but damage to the disc surface when the disc is being handled can adversely affect the disc playback.
- Be sure to use a felt-tip pen or similar writing tool when writing on the label side of the disc. Do not use a ball-point pen, pencil, or other hard-tipped writing tool, as these may damage the disc and may adversely affect the disc playback.
- Do not warp discs.
- When a disc is not currently being used, remove it from the unit and store in an appropriate case.
- When removing or storing a disc, be careful not to scratch the playing surface.
- Compact discs are not affected by small particles of dust or fingerprints on their playing surface, but even so they should be kept clean. Wipe by using a clean, dry cloth. Do not wipe with a circular motion; wipe straight outward from the center.



- Do not try to clean the disc's surface by using any type of disc cleaner, record spray, anti-static spray or liquid, or any other chemical-based liquid because such substances might irreparably damage the disc's surface.
- Do not expose discs to direct sunlight, high temperature or high humidity for a long period of time because these might warp or otherwise damage the disc.

To play back an 8-cm CD
Place it in the inner recessed area of the disc tray. Do not put a normal (12-cm) CD on top of an 8-cm CD.

TROUBLESHOOTING

If the unit fails to operate normally, check the following points to determine whether the fault can be corrected by the simple measures suggested. If it cannot be corrected, or if the fault is not listed in the SYMPTOM column, disconnect the power cord and contact your authorized Yamaha dealer or service center for help.

SYMPTOM	PROBABLE CAUSE	REMEDY
The unit does not switch ON when POWER is pressed.	The power cord is not connected nor completely connected.	Securely connect the power cord.
The disc tray does not close completely.	A foreign object is obstructing the tray.	Carefully check the disc tray and remove the foreign object.
Playback does not start.	The disc is damaged.	Check the disc carefully; replace it if necessary.
	There is moisture on the laser pickup.	Wait 20 to 30 minutes after switching the unit ON before trying to play back a disc.
	The disc is loaded upside down.	Reload the disc with the label side up.
	The disc is dirty.	Clean the disc.
	The CD-RW (ReWritable) disc is not recorded correctly.	Replace the disc with a correctly-recorded disc playable with this unit.
	The disc is a non-standard disc not playable with this unit.	
Playback is delayed, or begins at the wrong place.	The disc may be scratched or damaged.	Check the disc carefully; replace it if necessary.
No sound.	Improper output cable connections.	Connect the cables properly. If the problem persists, the cables may be defective.
	Improper amplifier operation.	Set the amplifier controls to the correct input selection.
	The OUTPUT LEVEL +/– buttons are set at minimum.	Adjust the volume by using the OUTPUT LEVEL +/– buttons.
Sound "skips".	The unit is being subjected to vibrations or impacts.	Relocate the unit.
	The disc is dirty.	Clean the disc.
Sound "hums".	Improper cable connections.	Securely connect the audio cables. If the problem persists, the cables may be defective.
Noise from a nearby tuner.	The tuner is too close to the unit.	Move the tuner and the main unit farther apart.
Noise from inside of the disc tray.	The disc may be warped.	Replace the disc.
The remote control does not work.	The batteries of the remote control are too weak.	Replace the batteries with new ones.
	Remote control is too far away or tilted too much.	Use within 6 m and 60° radius.
	Direct sunlight or lighting (of an inverter type fluorescent lamp etc.) is striking the remote control sensor of the main unit.	Reposition the main unit.
TV functions strangely when the remote control is used.	Remote control is being used near TV set with a remote control sensor.	Relocate the main unit away from the TV or cover TV's remote control sensor.

SPECIFICATIONS

Audio Section

Frequency response ..... 2 Hz – 20 kHz, ± 0.5 dB

Harmonic distortion + noise (1 kHz)
..... 0.003 % or less

S/N ratio ..... 105 dB or more

Dynamic range ..... 95 dB or more

Output voltage (1 kHz, 0 dB) ..... 2.0 ± 0.5 V

Laser Diode Properties

Material ..... GaAlAs

Wavelength ..... 780 nm

Emission Duration ..... continuous

Laser Output ..... max. 44.6 μW*

* This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.

General

Power requirements
Europe and U.K. models ..... 220-240 V, 50 Hz

Power consumption ..... 13 W

Dimensions (W x H x D) ..... 435 x 87 x 287 mm

Weight ..... 3.5 kg

Please note that all specifications are subject to change without notice.